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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/090,510	03/04/2002	Philip J. Mott	BW-DKT00080A	6034		
32175	7590 09/17/2004		EXAMINER			
	RNER INC.	VAN PELT,	VAN PELT, BRADLEY J			
- + ··	AIN TECHNICAL CEN MATION AVENUE, SI	ART UNIT	PAPER NUMBER			
	IILLS, MI 48326-1782	3682	3682			
			DATE MAILED, 00/17/200	DATE MAIL ED: 00/17/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Appli	cation No.	Applicant(s)					
			90,510	MOTT ET AL.		4			
Office Action Summary		Exam	iner	Art Unit					
		Bradle	ey J Van Pelt	3682					
Th Period for Re	e MAILING DATE of this commun	nication appears or	n the cover sheet with the c	orrespondence add	dress				
THE MAIL - Extensions after SIX (6 - If the period - If NO period - Failure to re Any reply re	ENED STATUTORY PERIOD F LING DATE OF THIS COMMUN of time may be available under the provisions of MONTHS from the mailing date of this common d for reply specified above is less than thirty (3 d for reply is specified above, the maximum some epply within the set or extended period for reply eceived by the Office later than three months ent term adjustment. See 37 CFR 1.704(b).	IICATION. s of 37 CFR 1.136(a). In a munication. 30) days, a reply within tha tatutory period will apply a y will, by statute, cause th	no event, however, may a reply be tin e statutory minimum of thirty (30) day and will expire SIX (6) MONTHS from e application to become ABANDONE	nely filed s will be considered timely the mailing date of this co (35 U.S.C. § 133).	<i>ı.</i> əmmunication.				
Status									
1)⊠ Res	sponsive to communication(s) file	ed on 29 Decemb	er 2003.						
2a)⊠ This	s action is FINAL.	2b) This action	is non-final.						
·	·—								
Disposition o	of Claims								
4a) 0 5)	Claim(s) 1-7 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) 1-7 is/are rejected.  Claim(s) is/are objected to.								
Application F	Papers								
9) <b></b> The	specification is objected to by th	ne Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.									
App	licant may not request that any obje	ection to the drawing	(s) be held in abeyance. Se	e 37 CFR 1.85(a).					
	lacement drawing sheet(s) including oath or declaration is objected t	•	• • • • • • • • • • • • • • • • • • • •	-	• •				
Priority unde	er 35 U.S.C. § 119								
a)	_	documents have documents have of the priority document Bureau (PCT	been received. been received in Application cuments have been received Rule 17.2(a)).	ion No ed in this National S	Stage				
Attachment(s)	Deferences Oils 4 (DTO DOS)		<b>.</b> □						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>			4) Interview Summary Paper No(s)/Mail Da						
3) Information	n Disclosure Statement(s) (PTO-1449 or s)/Mail Date		5) Notice of Informal F 6) Other:		1-152)				

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 5, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh (USPN 4,4042,676) in view of Nagin (USPN 3,672,237).

McIntosh discloses a chain for transmission of power from a driving sprocket having teeth to a driven sprocket having teeth comprising: a) a plurality of sprocket-engaged blocks (18) having a body with sides and a thickness therebetween, an upper surface and teeth opposite the upper surface, adapted to engage with the teeth of the driving sprocket and the teeth of the driven sprocket; b) a plurality of guide links (22), each guide link having a body with a thickness, a top surface, a bottom surface, a leading end and a trailing end; each guide link being movably fastened in pairs on opposite sides of the sprocket-engaging blocks to two adjoining sprocket engaging blocks, the guide links being dimensioned so that when the guide links and sprocket-engaging blocks are assembled, the top surfaces of the guide links project further than the top surfaces of the sprocket-engaging blocks, forming rails defining a trough therebetween; all of the guide links and sprocket-engaging blocks fastened together forming a continuous chain; and c) a retaining band (30) running around the chain in the trough, contacting the upper surface of the sprocket engaging blocks; so that when the chain is engaged with the driven sprocket and the

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driving sprocket, and rotational force is applied to the driven sprocket, the force is transferred by the teeth of the driving sprocket to the sprocket-engaging blocks engaged with the driving sprocket,

the guide links are fastened together around the sprocket-engaging blocks by pins (column 2 line 7) running through holes in the guide links and the sprocket-engaging blocks; the retaining band is made of a polymer (see column 2, line 28); the guide link comprises a tapered area forming a lower part of the leading end and trailing end (see fig. 3), to provide clearance as the chain wraps around the sprockets.

McIntosh does not disclose a compression-type chain, when the guide links are aligned in a straight line between the driving sprocket and the driven sprocket the leading end of a guide link contacts the trailing end of an adjoining link, and the leading end and trailing end of the guide links are substantially flat, nor force is transferred to the trailing end of the next guide link from the leading end, until the force is transferred to the sprocket-engaging blocks engaged with the driven sprocket, and thence as a rotational force to the driven sprocket.

Nagin shows a compression-type chain and when the guide links are aligned in a straight line, the leading end of a guide link contacts the trailing end of an adjoining link, and the leading end and trailing end of the guide links are substantially flat (see fig. 1) where force is transferred from leading to trailing ends of the guide links.

To modify the apparatus of McIntosh so as to provide a compression-type chain such that the contacting guide links contact each other when the chain is aligned in a straight line would have been obvious to one of ordinary skill in the art at the time the invention was made in view

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of the teachings of Nagin that such an arrangement improves the compression characteristics of the chain.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh in view of Nagin, as applied to claims 1, 2, 5, and 7, further in view of Henderson (USPN 4,595,385).

The above reference combination shows all of the instantly claimed invention, except a plurality of pins running between the pairs of guide links in the trough, retaining the band therein.

Henderson shows disclose a leading end of a guide link contacts the trailing end of an adjoining link a plurality of pins (67) running between the pairs of guide links (ends are considered guide links) in a trough (area between), retaining a band (34) therein.

To modify the above reference combination so as to provide pins between pairs of guides links would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the teachings of Henderson that such an arrangement improves the retaining characteristics of the band within the chain (see column 6, lines 43-45 of Henderson).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh in view of Nagin, as applied to claims 1, 2, 5, and 7, further in view of Mott (USPN 5,993,345).

McIntosh discloses a steel band (see column 2, line 27); however fails to show the retaining band comprises a plurality of laminations of steel band.

Mott shows a retaining band (106) comprises a plurality of laminations of steel band.

To modify the above reference combination so as to include laminations of a steel band would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the teachings of Mott that such an arrangement improves loading properties of the chain.

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## Response to Arguments

5. Applicant's arguments filed June 6, 2004 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

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